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THE MAGAZINE OF THE SOCIETY FOR TECHNICAL COMMUNICATION

TRANSLATION AND LOCALIZATION

IMPROVING ACCESS FOR GLOBAL AUDIENCES

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A Note from the Editor

Translation and localization are complex and sophisticated processes, addressing both the spoken or written language and the cultural differences surrounding it. How can we effectively integrate localization into our content operations? Can we reduce our costs? What role does machine translation play? Can we eliminate bias in machine learning? And how to we manage consistent terminology to support translators' efforts to provide high-quality content? This month's contributors answer those questions and more.

I also wanted to take a moment to thank those who came to the "Meet the Editors" session at the Technical Communication Summit in Rosemont back in May. For those who didn't have the opportunity to attend, please know that Dr. Miriam Williams and I are committed to helping you get published in *Technical Communication* and *Intercom*. We share an interest in publishing new authors and advancing careers. Even if you've never written for either publication before, we welcome your inquiries and submissions.

I hope you all have a safe and healthy summer with some opportunities for relaxation. ■

Alisa Bonsignore *(she/her)*

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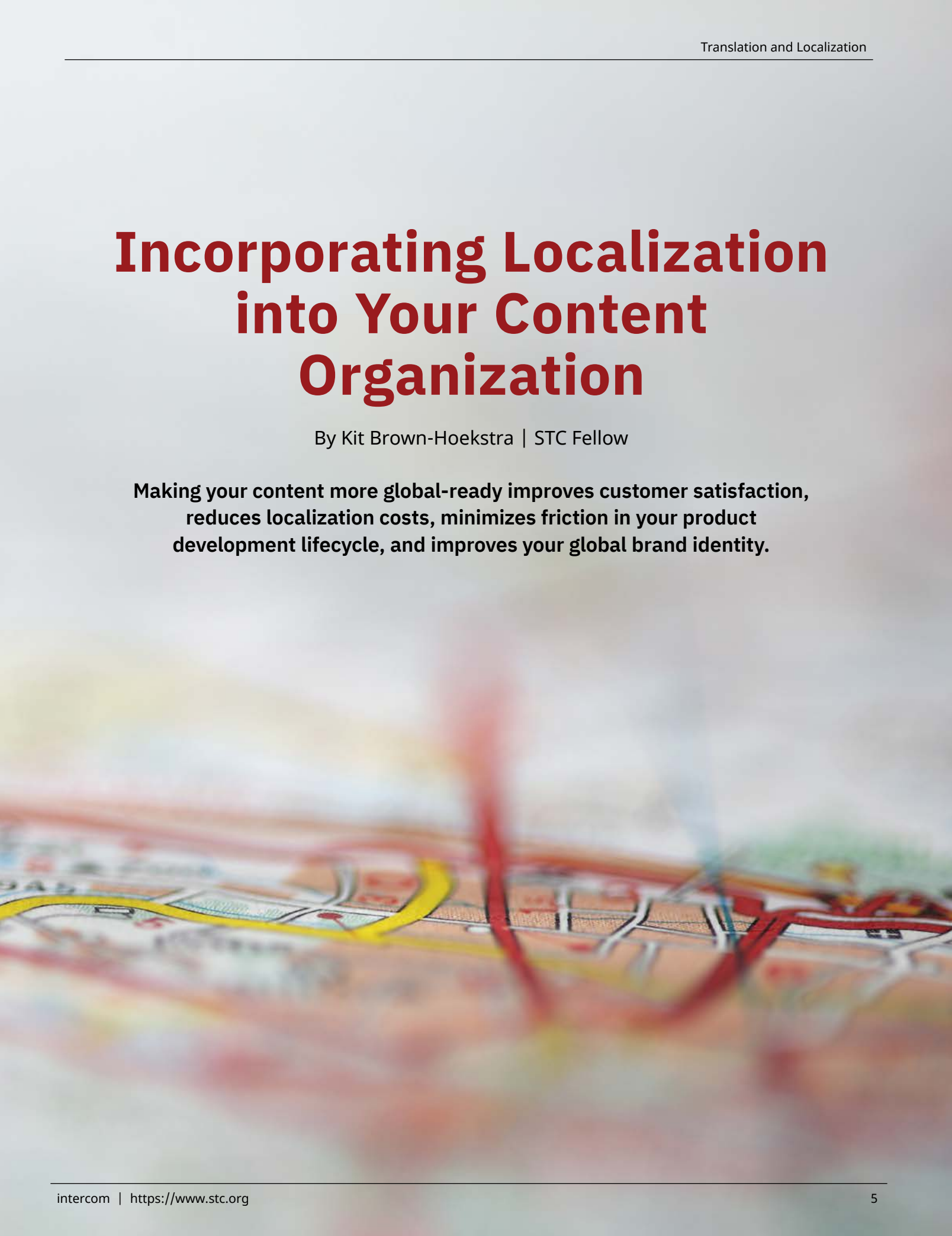
Incorporating Localization into Your Content Organization

By Kit Brown-Hoekstra | STC Fellow

Making your content more global-ready improves customer satisfaction, reduces localization costs, minimizes friction in your product development lifecycle, and improves your global brand identity.



Localization is an important, yet often neglected, component of your content organization. Even if your organization does not currently localize content for a global audience, you need to incorporate global readiness into your content strategy, engineering, and operations.

Here's why:

- 21.9% of the U.S. population are non-native English speakers.[1]
- 43% of the Canadian population are non-native English speakers.[2]
- While approximately 1.5 billion people speak English (19% of the world's population), only 370 million speak it as a native language. The remainder speak English with varying degrees of fluency.[3]
- 66% customers surveyed prefer to buy products in their native language, and 75% say they would be more likely to be loyal to a brand if the product was localized.[4]
- Many countries require local language availability, particularly for regulated products like medical devices, financial products, etc. Lack of an effective global content strategy restricts your organization's growth and market share.
- Localization is a garbage in/garbage out process. If your source content is not structured and global-ready, the content is likely causing significant costs in localization.
- Making your content global-ready also better serves your customers with accessibility needs, and increases your ability to quickly respond to new demands.

Global-ready content improves customer satisfaction, reduces localization costs, reduces friction in your product development lifecycle, and improves your global brand identity. Many times, even minor changes to the content development process can have huge impacts for localization, and ultimately, for your customers.

Analyze

When bringing localization into your content strategy, you need to gather some baseline data:

- List strategic business objectives and key performance indicators (KPIs) that your organization is working toward.
- Assess the volume of content produce annually and percentage localized.

Many times, even minor changes to the content development process can have huge impacts for localization, and ultimately, for your customers.

- Identify current locales and number of languages.
- Forecast planned locales and languages for one, three, and five years out.
- Set the annual localization budget.
- Estimate the desktop publishing and engineering costs for both source content and localized content.
- Research the cost of creating and localizing source graphics.
- Assess the successes and pain points that the localization service provider has when working with you.
- Survey in-country reviewers, global customer service, and global business unit counterparts to identify what's working and what's not.
- Measure the maturity of terminology management, quality assurance, change management, and lifecycle governance processes.
- Calculate the percentage of fuzzy matches in translation memories (Hint: a lot of 95%–98% matches indicate that preferential changes are being made to previously translated content.)
- Review the style guide and other governance documents.
- Calculate the percentage of duplicate content across product lines and opportunities for reuse.
- Identify the tools being used for authoring, production, distribution, etc.
- Note the channels being localized for each market and who is responsible for managing (e.g., local business unit, central content team, localization provider, or someone else).
- Audit content, architecture, templates, systems, and processes for other issues that affect localization.

Once you understand the landscape, you can identify priorities, begin planning, and establish effective metrics. As you develop the strategy, be

sure to connect your plans back to the overall organization goals. Doing so will help you sell any budget requests to upper management and will help you promote content as a business asset.

Plan

Unless you are working for a startup, it's likely that you will be retrofitting your content system to better support global readiness and localization. This requires you to prioritize as you start designing with the world in mind. Your analysis should give you a good idea of where to start incorporating localization into your strategy.

Remember, content strategy is an ongoing process, so build continuous improvement into your system. Look at your content holistically as you begin incorporating localization, starting with items that are easy or inexpensive to do, but have a huge impact.

Generally, making your source content and processes more global-ready can cut your localization costs by 20% or more. For example, if you create a graphic that costs $50, but has to be modified for 20 locales, the real cost of that graphic is $1,000. Now, multiply $1,000 by the number of graphics, and you can quickly see how small issues in the source content can completely blow your localization budget. As another example, if your writers are re-creating notes, cautions, and warnings instead of reusing them, you are 1) paying multiple times to translate the same content, 2) potentially increasing your company's liability if safety information isn't worded exactly the same, and 3) causing the writers to spend time that could be better spent on something else.

As you are planning, think about ways you can bake quality and global-readiness into your content and systems.

Build

Designing with the world in mind means working with content engineering, operations, and authoring to make sure that all your structures, processes, models, frameworks, etc., support and facilitate both source content development and localization for both text and visual content.

These frameworks need to be flexible and solid enough to accommodate new technology, channels, and so on, without collapsing under their own weight or getting blown away by the first problem.

Some good questions to consider include:

- Is your content well-structured and componentized, so that you can send batches of content to localization as it is approved?
- How does your workflow support localization?
- How do you store the localized content so that it is accessible to the correct channels?
- Does your semantic model support localization?
- If your product is software, are the user interface field labels stored in a way that is accessible to both localization and for single sourcing with the source content?
- Is your change management process proactive?
- Have you considered implementing controlled language?
- What can you systematize and automate to make the process more consistent and efficient?

In addition, terminology management needs to happen above the project level in order to be truly effective. Consistency across product lines helps reduce localization costs while improving your semantic model, taxonomies, search engine optimization, as well as your overall customer experience.

Your global content strategy is only as good as the system's ability to implement it.

Scale

Localization tends to increase system complexity exponentially as new languages are added. Most companies can limp along with manual processes when they just have one to three languages. Once companies start localizing five or more languages, however, they need a more robust and effective system.

Structured authoring, content management systems, ongoing user/customer research, and appropriate automation allow you to scale efficiently as you bring in new channels, audiences, and markets. Making your content more intelligent also helps you improve personalization, usability, and so on.

Building the frameworks to support content creation and management across the organization will improve the consistency and

quality of not only the content, but also the customer experience as a whole.

By measuring your baseline and then implementing metrics to track improvements, you can demonstrate the value of your content to the business and to your customer journey.

Conclusion

Localization should be part of your global content organization and not treated as a separate activity. To effectively pull in localization, first analyze and measure your current state, and identify where you can achieve the greatest impact for the lowest cost and least time. Then, build your roadmap and get started.

Remember, continuous improvement is the key to success. Your content strategy and roadmap should be living documents. This is an ongoing activity, not a "one and done." ■

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Cost-Cutting Strategies: Save More than $282 Million on Translation over the Next Five Years

By Adam Jones | Senior Member

New technology and strategies, from machine translation to tag-based formats, enable you to dramatically reduce translation costs.

At the 2017 STC Summit, we discussed "Avoiding the $36 Comma: Clever Editing Strategies Can Reduce Translation Costs." You learned that revising your English documentation was causing your company's translation costs to skyrocket as every little change needed to be replicated in dozens of target languages. Since then, STC members have done a fantastic job cutting down on needless editing, collectively saving an estimated $282,316,411!

Five years later, there are better ways to reduce localization costs even more dramatically.

Machine Translation

Machine translation technology has exponentially improved in recent years. Neural machine translation systems abound and produce decent quality in many languages and subject matter areas.

Although the initial results are very good, they still require post-editing by human linguists. During this process, professional translators edit the text to remove errors, correct terminology, and refine style. This work requires proficiency in the source and target languages as well as a knowledge of the subject matter. According to the ISO 18587 Standard focusing on post-editing of machine translation output, full post-editing should aim "to produce an output which is indistinguishable from human translation output."

While full post-editing is ideal and more frequently used, light post-editing is an option for translations that need not be perfect and where style and readability are less critical. Content that will not be published, such as information for internal use only, can undergo this lower level of post-editing to ensure rough accuracy and comprehensibility with less effort and expense.

Well-written source content with the following characteristics results in higher initial machine translation quality and requires less post-editing:

- Free from spelling mistakes or typos
- Consistent in terminology and syntax
- Well-structured
- In the active voice
- Composed of simple, concise sentences

> **Well-written source content results in higher initial machine translation quality and requires less post-editing.**

As with translation and review, costs for post-editing vary by language, primarily due to the cost of living in the countries where translators work (Table 1). For example, a post-editor for Simplified Chinese may live in China and be paid a third of what a post-editor who focuses on Swedish and lives in Sweden earns.

The suitability of each language for machine translation affects the post-editing effort required and the resulting cost. Romance languages, such as Spanish, Italian, French, and Portuguese, are most suited to machine translation. The translated text will require some post-editing, but the software can do almost all the work. On the other hand, Chinese, Japanese,

Base Translation Costs from English (per word)			
Target Language	**Professional Human Translation and Review**	**Machine Translation + Full Post-Editing**	**Machine Translation + Light Post-Editing**
Simplified Chinese	$0.13	$0.08	$0.08
Latin American Spanish	$0.16	$0.10	$0.08
French	$0.24	$0.17	$0.14
German	$0.24	$0.19	$0.15
Japanese	$0.28	$0.24	$0.18
Swedish	$0.30	$0.25	$0.19

Table 1. Comparison of industry average base per-word costs for professional human translation versus machine translation and post-editing. Rates are typically higher for more specialized subject areas and complex file formats.

and Korean require much more human revision effort. These languages feature complex structures and have many vocabulary nuances that machine translation tools cannot capture. Languages with the same translation costs may have different post-editing rates. For example, although translation and review costs are comparable for French and German, post-editing in German is more expensive because more work is required.

Interactive Translation Memory

Differing from machine translation, translation memory tools record the work of human translators. They store each text segment in a database, linking the source to the translation. Each target-language translation may be reused when the same source text appears in an update or another component.

Translation memory offers the advantages of reducing costs, accelerating schedules, and improving consistency. Therefore, creating and using translation memory should be a requirement of the translation process regardless of the approach or toolset selected.

These tools are more advanced in 2022 — most work with translators interactively, allowing a team of linguists to benefit from their colleagues' completed work. Unlike previous systems that required leveraging text before the translation process begins, the current software takes advantage of the cloud to update the translation memory database immediately as translators complete each segment. These continuous updates allow you to benefit from memory matches as soon as they are available, within the same document or another block of content.

Translation memory provides discounts such as those detailed in Table 2.

Scrutinize the leveraging logs to ensure that your translators use translation memory effectively

Subjective penalties for formatting differences and different strategies for calculating internal matches can increase the costs. With interactive translation memory, you should be able to generate savings by leveraging each set of content and text that matches previously translated segments. At the outset of each project, a close examination of the translation memory logs will help you understand the savings and make ongoing improvements.

Tag-Based Content Formats

Traditional word processing and page layout applications require formatting each target language at a significant expense. Text expansion in many target languages increases the effort necessary, causing issues with pagination, line

Did You Know?

Tools classify an "in-context match" as 101%, implying that it is even better than an "exact match" at 100%.

Discounts for Translation Memory Use	
Level of Translation Memory Match	**Percentage of Base Translation Rate**
Repeated text — text appearing in multiple places in the same component (e.g., a duplicated software string, a document footer used in multiple chapters, or a warning statement that applies to procedures in multiple chapters of a service manual)	10%–33%
In-context match (101% match) — text that matches a segment stored in the translation memory and appears in the same context it did when recorded in the translation memory (e.g., a sentence of documentation preceded and followed by the same sentences as it was when initially translated)	0%–10%
Exact match (100% match) — text that matches a segment stored in the translation memory, which could come from another file or component or from a previous revision of the same document	0%–33%
Fuzzy match (75%-99% match) – a segment of text that partially matches a segment in translation memory but has been changed somewhat (e.g., a sentence with one or two modified words, perhaps to update a product name or correct a grammar or punctuation error)	50%–75%

Table 2. Typical percentage charges for applying translation memory and reviewing text segments populated from memory. For example, a segment of fuzzy match text translated into Latin American Spanish by a professional translation firm would cost approximately $0.10 per word ($0.15/word × 66% = $0.10/word). The exact percentage charged varies by content, translation approach, and supplier.

> **A close examination of the translation memory logs will help you understand the savings and make ongoing improvements**

lengths, and formatting styles. Even if most of the text is leveraged from translation memory, all pages must be reformatted for every language.

Choosing a tagged file format (such as HTML or an XML-based structure like DITA) eliminates the need for manual formatting. The tags are maintained throughout the translation process, which isolates the text content. After translation, you will be able to generate the target-language output automatically to website pages, PDFs, or multiple formats.

This eliminates the formatting charge of $5–$12 per page to reduce the initial publication and update costs.

Analytics

With most documentation now distributed online, rich analytics can show which content end users read. You can use this data to select text for translation and determine the level of quality required.

- Frequently used content: Professional human translation and review
- Moderately used content: Machine translation and full post-editing
- Infrequently used content: Raw machine translation or machine translation and light post-editing
- Rarely used content: No translation

Did You Know?

In the localization industry, the post-editing step is usually referred to with a "+" sign instead of "and." Example: Machine translation + full post-editing

As information gains traction and more views, you can refine translations further. Disaggregating analytics by market enables you to select content for editing by target language. For example, a process referenced often in Japan could be translated or post-edited into Japanese even if it is seldom used in France and requires no French translation.

Simultaneous translation of all or subsets of documentation into dozens of target languages used to be the norm. Now you can carefully curate which information is relevant for and appeals to each market.

Unnecessary Language Service Provider Fees

Some greedy language service providers attempt to charge unnecessary fees for routine work. You can typically negotiate these expenses.

Translation costs for the application and review of translation memory are one area of variability that have the potential to drive up expenses without adding value. In-context and exact matches from translation memory do not typically require review but can incur per-word fees of 10%–33% of the base translation cost. There is usually no need to review the reused translations for routine updates where most of the text has not changed. This review is only necessary in cases where over 50% of the documentation set has been rewritten, restructured, or expanded.

> **Simultaneous translation of all or subsets of documentation into dozens of target languages used to be the norm. Now you can carefully curate which information is relevant for and appeals to each market.**

When reviewing translations, many organizations find areas where they prefer terminology or style updates, even in cases where no errors exist. Language service providers should incorporate one round of revisions at no charge, even if they are preferential or stylistic. It

can be helpful to clarify this expectation at the outset of each project to avoid paying for the incorporation of review comments.

You should own your translation memory and be able to take it to a new language service provider or use it among several translation partners simultaneously. The translation memory is a valuable asset that you should insist on receiving after every large project or on a routine basis (such as annually) at no additional charge. You do not want to pay to retranslate content because you do not have a current and complete translation memory.

> **Translation memory is a valuable asset that can be shared among translation partners to increase efficiency and cost savings.**

Many language service providers have robust systems for machine translation, translation memory, and translation management. Before investing in cloud or internal language technology for your organization, consider using your translation partner's portal, often available at a much lower or even no cost. Relying on your vendor's technology will also avoid implementation and integration hassles. By setting expectations up front, you should still be able to benefit from the accessibility, flexibility, and control you would find in an independent tool.

A Concluding Example

Combining machine translation and a tag-based content format will enable you to reduce initial translation costs dramatically. For example, Table 3 compares the cost estimates of translating a 250-page manual into six languages using old and new approaches.

Building and applying translation memory, using analytics to select meaningful content for translation, and avoiding unnecessary language service provider charges will allow you to benefit from additional ongoing savings. ■

Adam Jones (adam.jones @simultrans.com) is the president and COO of SimulTrans, where he has spent 29 years helping companies take their products and content to the world with translations in over 100 languages. Adam graduated from Stanford University, where he studied public policy with an emphasis on education. He has been a proud and grateful member of the STC for decades.

Cost Comparison for Translation and Formatting of a 250-page User Guide into Six Languages		
	Old Approaches	**New Strategies**
Translation Old: Human Translation and Review New: Machine Translation + Full Post-Editing	$84,375	$64,375
Formatting Old: Adobe InDesign New: DITA	$7,500	$0
Total Costs	$91,875	$64,375
Savings		$27,500 (33%)

Table 3. Comparison of old approaches to new strategies for translating and formatting a 250-page user guide into Simplified Chinese, French, German, Japanese, Latin American Spanish, and Swedish, assuming 250 words per page

Responsive MT and What It Means for Technical Professionals

By Arle Lommel

Machine translation is on the cusp of another revolution; advanced neural engines will soon be able to adapt to context and sophisticated metadata. What does all this mean for technical communication professionals?

Machine translation (MT) is on the cusp of yet another revolution. Increasingly advanced neural engines will soon be able to adapt to context and sophisticated metadata: information about the content it translates. Context refers both to the content that surrounds translated materials and to the social, linguistic, and technological environments in which it exists. Metadata encapsulates information about these contexts that makes data easier to process intelligently, and thus can deal with aspects such as formality and origin. Using the full power of metadata will, in turn, usher in an era of context-driven responsive machine translation.

> **Using the full power of metadata will usher in an era of context-driven responsive machine translation.**

We call this new class of systems "responsive" because of their ability to respond to context and audience requirements. The architecture of these systems will extend beyond today's relatively simple engines and require integration with advanced technology features.

The Evolution of MT

MT has come a long way since the IBM 701 computer, which in 1954 could automatically translate 60 carefully selected Russian sentences into English. Since then, the most popular commercial engines have been rule-based machine translation (prior to 2000), statistical machine translation (though 2015), and more recently, MT that uses neural networks. Context was always tricky: MT engines often had trouble because, as any good linguist knows, words have nuances and multiple meanings that influence the appropriate translations.

Narrowing the scope of translation was one way to improve outcomes. For example, vocabulary is used differently in legal contexts, engineering, and weather reports, so translation engines could be trained on industry-specific terminology to produce cleaner results. Imagine trying to translate a printer manual using an MT engine trained on the works of Shakespeare: the results would surely be comical at best.

Instead, we can reduce the need for the laborious process of training individual domain-specific engines if training data contains metadata about factors such as the subject field, client, level of formality, product lines to which it applies, and so forth. With metadata in the training data, there is no need to segregate individual industries' or companies' context into separate repositories. Essentially, today's silos of data will become irrelevant as repositories and engines develop the capability to self-select relevant subsets for particular requirements. With this metadata, engines will be able to adapt to as yet unforeseen use cases and scenarios on the fly.

Of course, this new approach will require substantial changes to core MT technology — and to how implementers interact with it. In conversations with language services providers, enterprises, government agencies, and freelancers, we have uncovered three trends that will drive the next act for MT and increase demand for responsible MT.

MT as a Platform Service Will Serve Larger Audiences

The first trend is increased adoption of MT as a platform service within other applications.

What do we mean by MT as a platform service? Take the case of a customer relationship management (CRM) platform such as Salesforce or Zendesk. In a simple case, an implementation results in flows of localized information among at least four parties: the organization that relies on the platform for business functions, its customers, the developer of the platform, and anyone building third-party applications within that ecosystem. This shift toward MT in the platform means that MT must serve a growing number of use cases servicing ever larger and more varied audiences.

The complex ways in which these streams of content interact can make traditional localization difficult, particularly for any multiparty interactions. For example, what happens when a Bulgarian customer interacts with a company in Germany that is using a US-based CRM with

plug-ins from a French developer? Because the interaction may involve content from all these sources, no single party can create a fully localized experience. Gaps in any one of them can contribute to a sub-par customer experience, so it is in the interest of all parties to solve the problem. However, because lines of responsibility are often unclear, improvements are frequently slow in coming.

This is particularly challenging when business-critical third-party applications are involved. When CSA Research examined major CRM developers in 2021, we discovered that most developers do not list the languages they support — only the Salesforce marketplace systematically identified which apps are localized — and most probably appear in just one language. In such cases the organizations that implement these apps and their customers have little recourse when the in-language experience breaks down unless someone is willing to pay developers to localize their apps.

Context-Driven MT Will Lead to Significant Improvements

The second trend is the shift to context-driven MT. Although most developers think of context as being just about working with larger chunks of the text (such as paragraphs, pages, or whole documents), our analysis shows that the ability to address multiple additional kinds of context will lead to radical improvements in MT.

Current development efforts at addressing context have largely focused on only one kind of context — what occurs before or after a segment. However, responsive MT will use a wide variety of context types encoded in metadata, such as information about who (or what) has created text, what kind of document it occurs in, the formality of the text, and many other features to adjust on the fly and select the most relevant training data and provide the best result.

Responsive MT thus automatically adapts to domains and text types at the segment level.

> **Rather than relying on document-level features and the selection of a single engine for a document, every segment can leverage the best and most relevant training data for it.**

Rather than relying on document-level features and the selection of a single engine for a document, every segment can leverage the best and most relevant training data for it. A short legal passage in a marketing text can be machine-translated using legal training data and a technical note can be rendered appropriately even if it appears in an annual report.

Responsive MT can also adjust itself to user or consumer feedback. Unlike current one-size-fits-all MT, responsive MT incorporates the capabilities of adaptive neural MT to learn over time. But it goes even further by integrating various sources of relevant feedback — such as explicit customer feedback — in order to deliver optimal results.

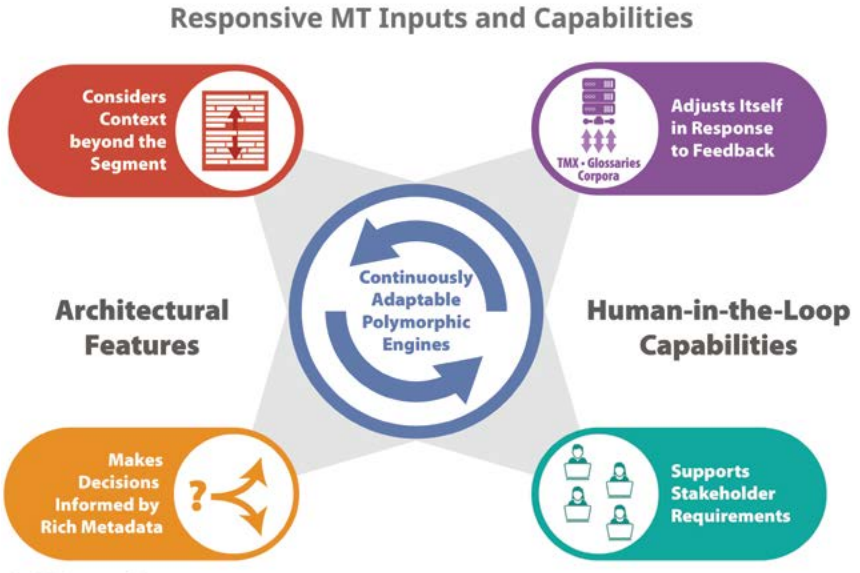
Responsive MT Inputs and Capabilities
Considers Context beyond the Segment
Adjusts Itself in Response to Feedback
TMX · Glossaries Corpora
Continuously Adaptable Polymorphic Engines
Architectural Features
Human-in-the-Loop Capabilities
Makes Decisions Informed by Rich Metadata
Supports Stakeholder Requirements
© CSA Research

Figure 1. How MT engines help adaptability

Similarly, responsive MT can incorporate new translation memory or terminology materials without the need for full retraining. Integrating these materials ensures that engines are up-to-date and provide relevant results without the need to rebuild engines.

Responsive MT will also assess its own usability. In cases where the results do not meet usefulness and serviceability requirements as defined by measures such as a company's own guidelines, it would flag that output for attention and cleanup by a professional linguist.

Metadata-Aware MT Will Bypass Domain-Specific Engines

The third trend, of course, is the emergence of metadata-aware MT. Today most MT engines consider very little metadata in their training. In the future, MT will be able to account for everything from the gender, age, or location of speakers or authors to the formality and register of text or the specific product lines it applies to. It will do this without needing domain-trained or product-trained engines, which are comparatively crude by comparison.

Responsive MT requires large amounts of metadata in the form of corpora and translation requests that currently do not exist. Few MT training sets contain even basic metadata (such as domain or customer information), much less the complex metadata envisioned in responsive MT. To the extent that organizations do have it, it tends to be maintained outside of the datasets and applied to them, rather than to specific segments. As a result, they may use a mix of metadata schemas and formats that degrade output quality.

Responsive MT requires organizationally relevant metadata at the segment level. Traditional translation memories used for training MT will fall short and will also lack the depth of contextual information needed. For responsive MT, it will be necessary to store documents and their translations with as much metadata as possible. It's also important that it preserve document structures, as these provide important information about the role that individual segments play within documents.

Taken together, these trends point to a future in which MT can respond intelligently to stakeholder requirements at multiple levels and deliver the best possible output for given contexts.

Implications for Technical Communicators

What does all this mean for technical communication professionals? First and foremost, it means that metadata will be very important at the source level and will need to be considered in the creation of any new documents. Whether it's formality, register, domain, gender, or something else, if the translation engines of tomorrow need to know context, the metadata should reflect it.

Given how complex this task is, and the current state of MT, there will be a significant need for technical communicators and tools that can capture this information. It's important to remember that metadata can be created either automatically — such as what happens when your computer stores a document with the time, date, author, and so on — or by manual input. In the future, competent and capable professionals who can create metadata-rich source material will be more in demand than ever. All in all, it's good news for technical writers. ■

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AI Ethics: Impact on Multilingual Content

By Olga Beregovaya

When working with AI, ethical standards play an increasingly critical role in managing bias and preventing harm.

Implementing artificial intelligence (AI) provides loads of opportunities, from automating critical business processes to creating multilingual digital humans. However, it also presents several ethical concerns and issues.

Lack of ethical standards in the development of AI applications and production or collection of the underlying data can lead to decision bias within ranking algorithms, such as evaluating job applicants or approving or declining a bank loan application.

According to Gartner, by 2022, 85% of AI projects will be delivering erroneous outcomes caused by the model training data bias., algorithmic bias, or demographics of those who developed the algorithms.[1] And Forrester predicts that in 2022, the market for ethical AI solutions will see huge growth.[2] So, the need for ethical standards in AI has never been more crucial.

This article addresses the issues and concerns regarding ethical AI and its future and how it will impact global content transformation processes.

What Is Ethical AI?

To begin, let's start with a definition of ethical AI. In short, ethical AI is a set of core principles, values, and implementation techniques that companies will need to consider and address when deploying AI technologies to preserve human dignity while ensuring no harm is caused to the end user.

> **Ethical AI: The set of core principles, values, and implementation techniques needed to preserve human dignity and prevent harm.**

These measures are normally centered on global laws, data protection regulations, employee safety regulations, and possible discrimination against traditionally marginalized communities including BIPOC, LGBTQIA+, women, and those with disabilities. They would also focus on the company's own legal and medical liabilities.

Why Is Ethical AI So Important?

More businesses are implementing AI to create solutions that elevate their offerings to gain a competitive edge, which can be incredibly profitable.

However, if you try to scale-up too quickly, particularly if you are a global company offering AI-enabled services across different languages, you could be putting your reputation on the line.

In addition, lack of ethical standards in development of AI technologies and capabilities can potentially lead to bias within ranking algorithms (as in job application example above), or within recommendation engines.

For example, in 2019 Optum was investigated for their algorithm that reportedly recommended that doctors and nurses pay closer attention to certain patients based on race.[3]

In the same year, Goldman Sachs was investigated for their algorithm that supposedly granted larger credit limits to men than women on their Apple cards.[4]

Amazon Alexa, Microsoft's Siri, and Google's voice assistant have also come under fire for discriminating against women. All these tech giants used female voices for their voice assistants, which some argued reaffirmed the stereotype that women are subservient.[5]

And finally, one of the most famed AI training data sourcing incidents was brought to us by Facebook. In 2018, the company granted the political firm, Cambridge Analytica, access to the personal data of over 50 million users.[6]

Because of these recent issues, according to MarketingWeek's coverage of responsible AI, some of the world's leading conglomerates like Microsoft, Twitter, Google, and Instagram are creating new algorithms that focus on the ethical side of AI.[7]

These new algorithms aim to intercept problems that could arise when collecting and using thousands of training data sources in their machine learning models.

Issues and Concerns in AI Ethics

Now you have an understanding of how not taking ethics into account in AI can have a negative impact on a business. Let's take a look at three main pain points that can cause ethical problems when developing and implementing AI.

1. AI Model Output Bias

Machine learning, the current foundation of AI, effectively trains neural network-based models on the underlying massive bodies of data.

And while this can offer many benefits, it can also lead to bias across the whole system in potentially detrimental and unexpected ways. For instance, AI model bias has been identified in photograph captioning and criminal punishment.

> **Machine learning, the foundation of AI, can lead to bias in potentially detrimental and unexpected ways.**

Data bias refers to any kind of frequent legacy patterns that prevail in the training data and subsequently skew the model towards certain phenomena, the ones most discussed recently would be related to social unfairness, treating certain groups differently based on their age, race, gender, sexual preferences, or other characteristics. These patterns are learned by language models from the training data and are one of the causes of the machine learning (or AI) output bias, be it conversational AI, prediction, or recommendation.

Algorithmic bias in AI refers to repeatable and systematic errors produced by the machine learning algorithm, which can be caused by multiple factors (system design, the way the training data is labeled and used, lack of regular system audits, or the demographics of the members of the teams who created the application).

Both types of biases lead to the same result — the output can cause harmful, discriminatory effects on victims of these biases while reducing trust in government, corporations, and institutions that use the biased products.

2. Discouragement and De-Skilling

Harvard Business Review underscored the importance of upholding emotional intelligence (EQ) when working with AI applications:

"Those that want to stay relevant in their professions will need to focus on skills and capabilities that artificial intelligence has trouble replicating — understanding, motivating, and interacting with human beings."[8]

EQ is described as our natural ability to empathize and influence human emotions.

It doesn't matter if they're your own emotions or another person's emotions. With high EQ, you should be able to identify, understand, and influence emotions, in a variety of languages, at a level that no best-in-class AI technology can match yet.

On the flip side, there are AI-powered tools that can help humans realign their moral compass and augment their EQ. For example, customer service AI platforms are capable of detecting nuances in a caller's voice.

This enables the platform to provide insights and guidance to customer service representatives when connected to customers in real time. As such, agents can preemptively de-escalate frustration, capitalize on purchase intent, and generally be more in tune with the customer's emotions.

3. Technical Safety

Two of the biggest concerns with implementing AI is whether the applications and platforms will work as intended, and/or whether user physical safety will be addressed, thoroughly tested, and confirmed. This can be challenging, especially for industries and companies that are heavily dependent on AI. For example, unfortunately, people have died in semi-autonomous car crashes due to AI-enabled vehicles failing to make safe decisions.

> **AI ethics is critical. Global standards must be put in place to regulate AI use and ensure technical safety.**

That is why AI ethics is critical. These global standards must be put in place to regulate AI use and ensure technical safety across countries, industries and applications. Otherwise, the outcomes could be detrimental or even catastrophic to the wellbeing of end users.

The Next Big Thing: Multilingual Metaverse

The "next big thing" that is taking the digital world by storm is the Metaverse. Creating the ethical Metaverse in one language is already tricky, but creating the multilingual Metaverse with ethical AI practices in place can be even more challenging.

But there are ways to overcome these barriers when you decide to delve into the multilingual Metaverse, many approaches have already been implemented in the gaming space and the precursors of the Metaverse, such as Second Life.

How AI Ethics Impacts the Language Space

AI ethics plays a crucial role in handling the ethical implications of AI practices within the natural language space. Some ways AI ethics can help companies maintain moral practices across natural language understanding (NLU), natural language generation (NLG), and translation procedures include the following:

1. Identify Social Bias

In 2016, Microsoft revealed its conversational content generation experiment — an AI-powered Twitter bot called "Tay." And, on the same day, the program started tweeting offensive and racist messages.[9] It set a dangerous precedent for future AI projects in the language space.

That is, continuing to develop multilingual content and conversational AI applications without the ability to identify and control cultural issues and social biases. There are AI tools available with capabilities to identify and analyze moral issues within text in different languages and alert stakeholders promptly.

For instance, you can perform problematic content detection, which allows humans and training bots to find well-known biases within the linguistic expression of medically, socially, and politically sensitive questions.

The training data can include gender and racial non-inclusiveness, suggested corrections on dangerously ambiguous language, and collected information on signals relevant to improving worker experience and quality evaluation processes.

Many state-of-the-art machine translation (MT) engines can even handle gender-friendly translation issues and errors accurately. Welocalize utilizes different components of AI to detect non-inclusive language and offensive terms and their variants in language-specific engine training corpora. They then make replacement recommendations and provide synonym definitions for more accurate understanding.

Generally, systemic bias is unlikely to turn into a major translation automation problem, mainly because in the majority of cases, the process includes the "human-in-the-loop," and because of risk mitigation approaches.

2. Monitoring Issues in User-Generated Social Media Content

User-generated content holds more influence than branded content over customer perceptions and purchase decisions. Some examples are:

- Customer reviews
- Social media comments
- Discussion threads in forums
- Social media posts

If you're a translation buyer, you usually can't control the input quality upstream of social media user-generated content and online commentaries. This is where AI comes in, since language service providers can use cutting-edge technology to automatically scan phrase or word signals for fake content, obscene language, or dangerous social bias.

You can use your user-generated content as constantly growing training corpora for AI applications that will identify biased behavior in your target markets, conduct foreign language sentiment analysis, and adapt future marketing messaging and social media content for better engagement. ■

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Additional Reading

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Multilingual Terminology Management in Intergovernmental Organizations

By Maria Carmen Staiano

Terminology resources provide translators with the information needed to learn the subject matter and improve the overall clarity for readers.

Terminology is a discipline unto itself, and one that plays a particularly important role in technical communication for intergovernmental organizations (IGOs). It maintains linguistic consistency, ensuring that the same message is communicated in different countries.

What Is Terminology?

Terminology is a discipline that studies the relationships between concepts and terms, which are relevant to one or more specialized domains of human activity.

Terminology as a science mainly deals with:

- the standardization of the use of terms
- the transfer of knowledge within and across specialized communication settings

- the systematic description of terms belonging to specific subject fields
- the creation of useful resources for translators, technical writers, buyers and language service providers

Why Terminology Planning Matters

Having standardized terminology has stepped up as an essential factor in every organization. Terminology departments are becoming an asset in their standardization and harmonization activities.

Terminology planning activities deal with the organization of terms. This ranges from the creation of neologisms to the standardization of existing ones and to term representation by responding to the target user needs and demands of domain communication.

In this context, terminology planning matters because it helps to organize technical communication, setting boundaries between languages for specific purposes (LSPs) and the general language. It explains why terms sometimes converge into each other since language contact, borrowing, and code-switching are widespread phenomena in technical communication.

Terminology resources provide translators with the information they need to resolve doubts (i.e., find an equivalent in the target language), learn the meaning of a term in the source language, or select the best option between different terms. However, it should be added that terminology ensures that translations are consistent and accurate. Translation-oriented terminology is highly developed in bilingual and multilingual countries such as Canada (the francophone region of Quebec) and Switzerland. It forms the basis of the activities of international organizations and institutions such as FAO, the United Nations, UNESCO,[1] and the European Union.[2] This approach is the primary motivation for creating institutional terminology databases, such as InterActive Terminology for Europe (IATE), operated by the European Union, and Termium Plus of the Canadian government, which we will explore more in detail in the following sections.

Definitions

Languages for specific purposes (LSPs) are varieties of a language used by expert communities and share either domain-specific terminology and language conventions from the general language.

General language is the everyday language used by individual language communities.

Terminology in International and Government Institutions: Some Use Cases

Due to the crucial role of terminology in scientific-technical planning, knowledge representation, and business communication processes, terminology planning policies and resources are a matter of concern for international organizations and governments.

Terminology planning ensures the linguistic consistency of legislative texts, like in the European Union (EU), which impacts directly or indirectly the laws of its Member States. These laws are translated into the 24 official languages of the Union, and each document has the same legal value as the original.

The EU has always considered its great variety of cultures and languages an asset. Firmly anchored in the European Treaties, multilingualism reflects this cultural and linguistic diversity. It also makes the European institutions more accessible and transparent for all citizens of the Union, which is crucial for the proper functioning of the EU's democratic system. With around 5,000 translators and interpreters working in 552 linguistic combinations, the EU has the world's largest translation service.

In this context it is important to recall the activity of the Council of Europe which ensures the implementation of its rules and functions in several languages; English and French are the official languages, while German, Italian, and Russian are used as working languages.

The use of consistent terminology in legislative procedures is pivotal to the smooth efficiency and functionality of the whole system. To meet such a challenge, the European Parliament relies

on the activity of Terminology Coordination Unit (TermCoord).[3]

TermCoord's activities concern the coordination and management of terminology entries made by the translators of the European Parliament through the Interactive Terminology for Europe (IATE) database; it supports the production and management of terminology for the Language Units of the EP. In addition, TermCoord oversees terminology management tools and implements terminology projects within the Units. One activity of particular interest is the role of promoting inter-institutional communication and cooperation.

A similar scenario can be found in the United Nations, where multilingualism is recognized by the General Assembly as a key principle of the Organization. Arabic, Chinese, English, French, Russian, and Spanish are the official languages of the United Nations, and each treaty, convention or resolution is translated into these six languages, acting as a binding original under international law.

TMS vs TDB

The mentioned organizations are some of the greatest examples of the importance of terminology within multilingual contexts. It is crucial to avoid any linguistic inconsistency, especially when talking about legislative texts, since they could provoke an international judicial dispute.

For this reason, these organizations and many other IGOs rely on terminology resources and tools to curtail any inconsistencies.

These tools include terminology management systems (TMS) and terminology databases (TDB).

TMS are designed as tools to record, store, process, and output terminology data according to recognized professional standards. They are increasingly being developed as tools integrated for use in a variety of applications such as: computer-aided translation; technical and scientific writing (including technical documentation); internal documentation management; and e-commerce, to name a few.

TDBs, which can be either monolingual or multilingual, are collection of terms that are processed by TMS. Sometimes large TDBs are integrated into a more or less sophisticated structure of an organization or institution and are used for the collection and storage of large amounts of terminology data aimed at a large number of users.

Terminology Databases: A Few Examples

Let us explore some of the most popular terminology databases used in international organizations and multilingual government institutions (such as Canada and Switzerland).

- **IATE** is one of the largest terminology databases in the world. It is the result of brilliant interinstitutional cooperation and standardization effort. Initially launched in 1999, it comprises more than 8 million terms in the 24 official languages of the EU. It was made available to the general public in 2007 and gathered all the terminology resources of all EU translation services. The Translation Centre oversees the technical aspects of the project on behalf of its partners: the translation services of the European Commission; the Council of the European Union; the European Parliament; the Court of Auditors; the European Economic and Social Committee/Committee of the Regions; the Court of Justice; the European Investment Bank; the Publications Office; and the European Central Bank. The new version of IATE was launched in 2018, characterized by its greater interoperability with third-party tools and a more intuitive UI, focusing on accessibility and usability.
- **UNTERM** is a multilingual terminology database of the United Nations, managed by the Secretariat and certain specialized agencies of the U.N. system, including the International Maritime Organization, the United Nations Educational, Scientific and Cultural Organization, the World Health Organization and the World Meteorological Organization. The entries are available in the six UN official languages**,** but it is also possible to consult some terminology records in German and Portuguese. The database provides terminology and nomenclature in topics of interest to the work of the United Nations system.
- **WIPO Pearl** is the Multilingual Terminology Portal of the World Intellectual Property. It is

one of the most reliable sources for patent translations, since it contains scientific and technical terms. The database is available in 10 languages: Arabic, Chinese, English, French, German, Japanese, Korean, Portuguese, Russian, and Spanish. It is possible to perform a bilingual or multilingual research that will provide you with definitions, reliability scores, sources, links to Google Images search and patent database Patentscope, as well as to a concept map, a "diagram illustrating the relationships existing between concepts in a specific area of scientific or technical knowledge."

- **TERMIUM Plus®** is the terminological database managed by the Translation Bureau of Public Services and Procurement Canada, a federal government department. The database offers millions of terms in English and French from various specialized fields and some in Spanish and Portuguese to adapt to its growing range of users. It includes various domains, ranging from public administration to arts, law, and sciences. It is possible to find terms, abbreviations, definitions, and terms in contexts.
- **TERMDAT** is an extensive multilingual database of the Swiss Confederation. It contains terminology entries related to Swiss federal law, public administration, and the public sector in Switzerland's in the four national languages — German, French, Italian and Romansh, plus English. Besides legal and administrative terminology, it is possible to consult entries related to fields such as agriculture, culture, economics, energy, environment, finance, industry, IT, medicine, the military, politics, science, technology, telecommunications, trade, and transport.

Since terminology science is a highly interdisciplinary field, terminology practice needs the cooperation of experts from various fields. It is important to remember that behind every terminology database is the tremendous work of technical translators, linguists, and subject-matter experts who have conducted extensive research to validate terms in different languages. Terminology activities can produce various terminology resources, such as terminology standards, LSP dictionaries, glossaries, terminology databases, etc. Together with terminology services, such as terminology consulting and training, they are generally used as tools for the implementation of terminology policies, which shall aim at the standardization of knowledge in different subject fields and the development of concrete scientific and technical communication skills. ■

Further Resources

For more information on each database, visit:

IATE: https://www.iate.europa.eu

UNTERM: https://www.unterm.un.org/unterm/portal/welcome

WIPO Pearl: https://www.wipo.int/reference/en/wipopearl/index.html

TERMIUM Plus®: https://www.btb.termiumplus.gc.ca/tpv2alpha/alpha-eng.html?lang=eng

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Upcoming Webinars

Effectively Documenting APIs and SDKs

Instructor: Girish K. Sankaran

Wednesday, 10 August 2022

12:00–1:00 PM EST (GMT-4)

Application Programming Interfaces (APIs) and Software Development Kits (SDKs) are often used interchangeably. However, they are conceptually different. Join Girish Sankaran as he reviews some best practices for documenting any API from scratch regardless of the API type.

For full details and registration, visit: **https://www.stc.org/event/apis-and-sdks-0822**

An Introduction to OpenAPI Specification Files for API Documentation

Instructor: Robert Delwood

Wednesday, 17 August 2022

12:00–1:00 PM EST (GMT-4)

The OpenAPI specification file is at the center of most API documentation. Writers wanting to transition to API documentation writing will want to become familiar with this file and its formatting. This presentation will talk about what OpenAPI is supposed to do, its formatting, the YAML language, and how it interacts with documentation.

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Workplace Preparation or Social Justice Work? Joining Goals in a Technical and Professional Communication Classroom

BY ELENA KALODNER-MARTIN

As a technical and professional communication (TPC) graduate student, practitioner, *and* instructor, I spend a lot of time thinking about what it means to "do" socially just technical communication work, which seeks to "amplify the agency of oppressed people — those who are materially, socially, politically, and/or economically under-resourced" in "collaborative and respectful" ways.[1] I am particularly interested in considering social justice technical communication in the classroom, where I (and many other instructors) are constantly navigating our commitments to social justice, with the ever-present pressure to do what teachers are *supposed* to do in humanities departments: help students get jobs.

These tensions are threaded throughout TPC scholarship. Based on an analysis of TPC job postings, a 2015 report[2] identified the desirable professional competencies (Figure 1) and personal characteristics (Figure 2) for applicants, ranging from subject matter familiarity and strong written communication skills to the ability to multitask, think creatively, and work collaboratively. More recently, a 2021 study[3] examined how curricular efforts in TPC programs have been shaped by the increasing commitments to social justice, with references to how this might be strategically developed in classroom settings. What would it look like to bring these conversations together? Put differently: how can we view social justice as a goal not just of our classroom curricula, but also as an integral part of our workplace preparation efforts?

As part of my contribution to this work, I draw from *interstitial design*, an iterative and

interdisciplinary approach to "solv[ing] complex problems in a socially engaged world."[4] Interstitial design (Figure 3) draws from the concept of *interstitiality,* or "in-betweenness," to account for the overlap between social design, design thinking,[5] and power, positionality, and privilege (3Ps). The 3Ps are "macro-level concepts that ground the enactment of socially just technical communication"[6] and guide discussions of social justice both inside and outside classroom settings. As such, interstitial design does not just provide concrete and tangible skills for technical communicators or promote the identification of social issues, but also offers a flexible framework for interrogating who designs solutions, for whom, and under what circumstances. Interstitial design also opens up possibilities; by expanding discussions of what TC "is" and "does" past a particular author, genre, or site, interstitial design allows TC competencies and skills to flourish in personal, professional, *and* pedagogical settings.

In what follows, I provide brief overviews of several students' grant proposals from one of the TPC classes that I teach as a graduate Teaching Associate. *Introduction to Professional Writing,* the gateway course for students entering the undergraduate Professional Writing and Technical Communication (PWTC) certificate program at the University of Massachusetts Amherst, is an upper-level class that familiarizes students with common genres in TPC workplaces, such as job documents, memos, and professional presentations. However, grant proposals, addressed to a funding agency on behalf of a nonprofit, are the central focus for this class. Students spend much of the semester following an interstitial design-informed protocol that asks them to consider their own values, identify a pressing social concern, conduct background

	CD/M	G/PW	MW	SM	TW/E
Audience Awareness	37%	19%	13%	35%	29%
Business/Strategic Planning	18%	12%	0%	34%	3%
Comm-Client/Customer	24%	15%	29%	35%	13%
Comm-Oral/Verbal	32%	46%	37%	40%	35%
Comm-Written	74%	86%	87%	70%	75%
Comm-Unspecified	22%	14%	8%	19%	17%
Content Dev/Mgmt	72%	12%	13%	34%	15%
Editing	50%	51%	58%	25%	51%
Project Planning/Mgmt	55%	69%	58%	67%	49%
Research	28%	62%	50%	28%	40%
Style Guides/Standards	36%	23%	45%	15%	40%
Subject Matter Familiarity	31%	33%	76%	25%	45%
Transl. Complex Material	8%	12%	16%	5%	20%
Usability & Testing	29%	0%	0%	2%	22%
Visual Communication	44%	29%	50%	27%	49%
Web Analytics	41%	1%	0%	70%	3%
Website Design	25%	0%	0%	9%	4%
Work with SMEs	12%	35%	8%	4%	41%

Figure 1. From Brumberger and Lauer, titled, "Professional Competencies by Job Category." The job categories, listed on the top of the visual, refer to (left to right): content developer/manager, grant/proposal writer, medical writer, social media writer, and technical writer/editor. These jobs, based on the analysis, were the five most common broad categories for TPC postings.

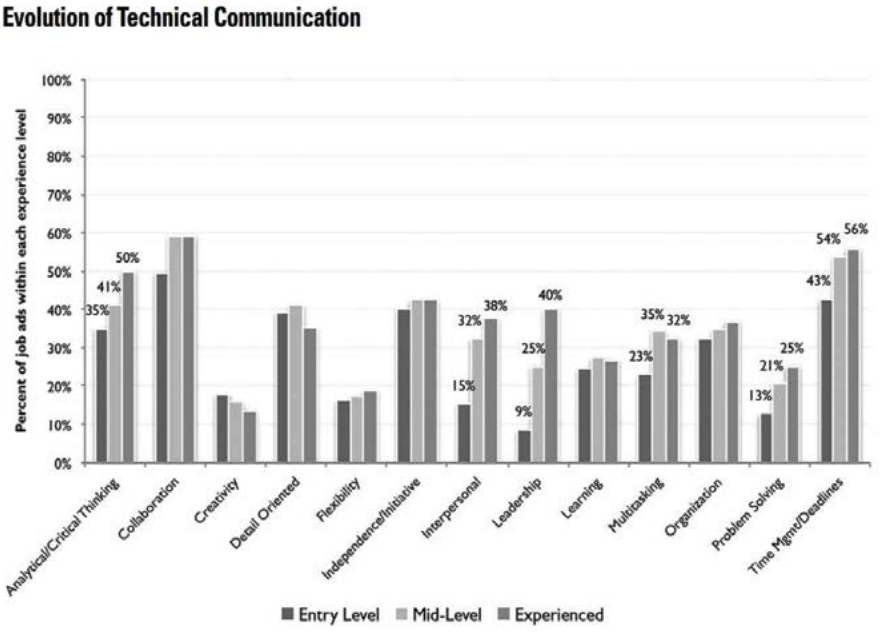

Figure 2. From Brumberger and Lauer, titled "Personal Characteristics by Experience Level."

research, identify partners, compose a document that asks for funding or resources in support of their intervention, gather feedback, and finally, revise accordingly. Throughout this process, students and I navigated the following questions:

- How can we ground our discussion of the "problem" and our proposed solution in our target audience's lived experiences and local needs?
- How does our positionality, and the subsequent privilege and power that we gain from this, shape our understanding of the issue and proposed intervention?
- How can technical communicators use grant proposals to advocate for underserved communities?

Many students' proposals in the class were geared towards addressing a pressing problem within the immediate community. For example, Isaiah's grant proposal was grounded in the increasing prevalence of homelessness and housing instability across the nation *and* the simultaneous lack of educational resources for students on campus. He sought funds for seminars about homelessness education and intervention. His three workshops, outlined alongside the expertise of a state agency for homelessness prevention, were designed to be inclusive of a general audience's knowledge while providing concrete resources for future activist efforts both on and off campus.

Another student, Emma, approached thinking about campus' affordances differently. Her proposal requested financial assistance for a bra and menstrual product drive, with plans for the collected items to be distributed to low-income people and families across the state with the help of a local nonprofit partner. She reasoned that, with so many students wanting to get rid of things as they move out of campus housing at the end of the semester, it is likely that these highly-needed (and often inaccessible) materials would be easy to collect and would reduce unnecessary waste.

However, a couple of students also composed proposals that could address issues of inequity across the nation. Jeremy, informed by his passion for writing, designed a creative writing workshop for underserved youth at a community center in Washington State. His grant proposal interrogated the many barriers to extracurricular activities and challenged the ways that institutional writing "progress" is often measured by metrics that reinforce patterns of marginalization along raced and classed lines.

Another student, Zane, also considered structural barriers within formal education and proposed community-oriented alternatives. He focused on issues of diversity and inclusion in predominantly white state of Vermont, and he deftly wove his research into economic, social, and cultural influences for institutional racism into his proposed intervention for racial justice education seminars.

As students and I explore, there's a lot of technical work in grant proposals: complicated information to relay about existing problems and potential solutions, complex data to draw from, and a wide range of professional experts and stakeholders to consider. They researched, outlined, wrote, analyzed, discussed, presented, and revised these documents, all while confronting weighty issues of injustice and inequality.

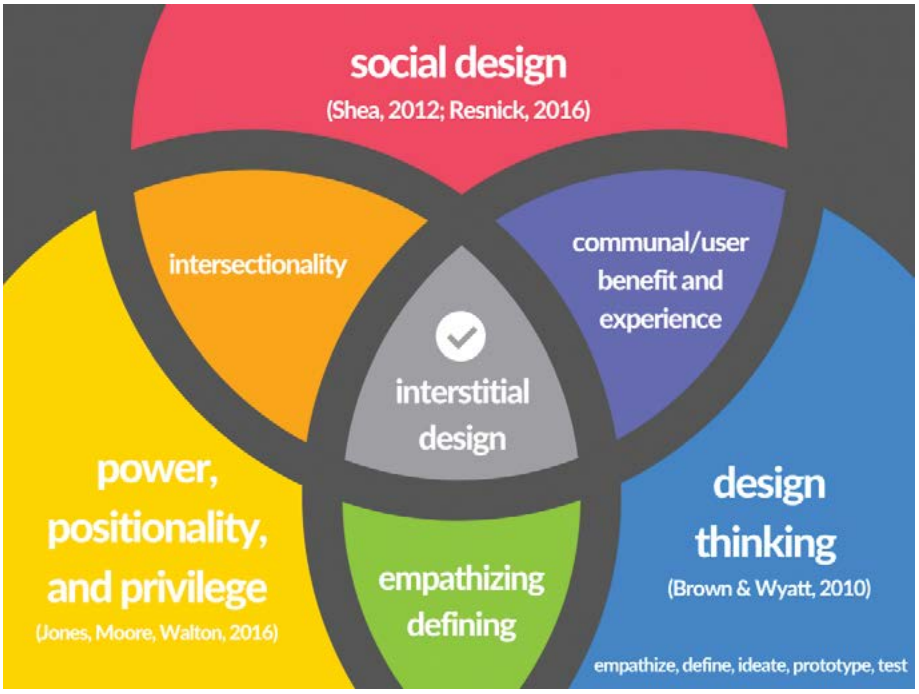

Figure 3. Adapted from Lane, this colorized visual shows the overlapping elements of the 3Ps, social design, and design thinking, with interstitial design at its center.

Interstitial design supported the class throughout this process, and these brief examples do not do justice (pun intended) to the depth and complexity of these proposals. This case reveals that grant proposal assignments, guided by interstitial design, can support students in honing professional skills, developing genre knowledge, and furthering their technical capabilities while simultaneously centering the complexities of social justice work.

This case is just one example of the many ways that teachers can (and undoubtedly already do) prepare students for professional careers while still practicing a social justice pedagogy. However, there is still more work to be done. By bringing together ideas of what it means to demonstrate workplace competencies alongside commitments to inclusivity, equity, and access, I suggest that all of us — technical communication educators, program administrators, scholars, practitioners, and more — can continue to shape a more justice-oriented field, both within our classrooms and beyond. ■

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Elena Kalodner-Martin is a PhD candidate in composition and rhetoric at the University of Massachusetts Amherst. Her research interests are at the intersections of technical communication, the rhetoric of health and medicine, and intersectional feminist studies. She is also a research writer at Untold Content, an innovation storytelling firm.

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Advancing Your Tech Comm Career

BY KEVIN MEGLIC | STC Member

In the last Advancing Your Tech Comm Career column, Jack Molisani covered creative ways to gain tech comm experience and find job leads. His examples included reviewing a new piece of software for his STC newsletter, doing market research by interviewing companies that he wanted to work at, and gaining confidence by taking an improv comedy workshop or joining Toastmasters.

In this edition I will touch on the importance of networking and gaining marketable skills and knowledge to further you career in tech comm.

Ways to Put Yourself Out There

We have never been more connected, and those connections can help you get ahead. By attending local networking events (either virtually or in-person) you let those in your community/field know that you are actively participating and looking for an opportunity to grow your professional circle.

> **We have never been more connected, and those connections can help you get ahead.**

If you are not sure where to start, there are tools at your disposal. Many social networking platforms (Facebook, Meetup, LinkedIn, etc.) already have events in your area and if they don't, you can create your own. Don't be afraid to be the first.

Volunteering

Volunteering is another way to network and beef up your resume at the same time. Much like a college application, future employers look at what you do outside of work as an opportunity to get to know you as a person and not just a candidate. There are many ways for you to get out there and serve your personal or professional community.

Organizations like the STC are always looking for help. High

schools, after-school programs, and colleges are looking for tutors and mentors to help guide and teach the future tech writers of tomorrow.

Conferences in the tech comm industry (like LavaCon or STC's Annual Summit) look for volunteers for multiple positions (some of them reoccurring), and often comp these individuals into the conference for their efforts.

Public Speaking

Speaking at meetings and conferences is another great way to get your name out there and add another bullet point on your resume.

I recently was asked to create a presentation for a conference and thought I had no relevant experience to speak on. However, a presentation is just a story and a lesson learned. We all have those!

> **Don't fear conference presentations; they are just a story and a lesson learned.**

So drum up something out of your life experience and how you think it relates to the subject matter and submit it. The worst thing they can say is no, right?!?

Building Marketable Skills and Knowledge

"Knowledge is power" and you can never have too much of it. My grandfather used to say, "If you're lucky you learn something new every day." I used to take that as, "If you don't, that is a day wasted."

Earlier in my career, I was working as an electrician performing repair and maintenance on overhead lights in parking lots. One time, it rained on and off for two weeks. Due to the fact that water and electricity do not mix, I had to stop working. I was being paid hourly at the time, so you can imagine how this affected my paycheck. Knowing that rain was going to be an unpredictable inevitability, I decided to go back to school and learn about a career I could do indoors.

With the introduction of online, self-paced schooling it has never been easier to advance your education and get a degree or certification that can take your career to the next level.

If you are looking to indoctrinate yourself or sharpen your tech comm skills, there are many short-term options called "bootcamps" that do just that.

When deciding which classes would boost your tech comm toolbox, search through job postings and see what requirements they have in common. From there you can determine which skills are the most sought after. You can also read articles on future tech and see what will be popular in the next few months/years. For example, the relationship between the IoT (Internet of Things) and CCMSs (Component Content Management Systems).

Both DITA and DITA XML are hot right now. As a professional recruiter, I can tell you personally that there aren't enough qualified technical writers to fill the demand. A great place to start learning DITA is a free online class offered by Scriptorium at LearningDITA.com

After acquiring these new skills, volunteer in groups as mentioned earlier in the column.

Get that experience on your resume and samples in your portfolio!

In Closing

There are many methods you can employ to enhance your footprint in the tech comm community and advance your career. Don't be afraid to put yourself out there. You're worth it! ■

Kevin Meglic (kevin.meglic @prospringstaffing .com) is the interim President of Los Angeles STC chapter, and is Lead Recruiter at ProSpring Technical Staffing, a staffing agency that specializes in content professionals. https:// ProSpringStaffing.com. He is also the Director of Operations at The LavaCon Conference on Content Strategy and TechComm Management, which will be in New Orleans this October. You can connect with him at https:// www.linkedin.com /in/kevin-meglic -913101104/

Looking Forward

BY AIESSA MOYNA | STC President

The following is a transcription of STC President Aiessa Moyna's speech delivered at the Annual Business Meeting on 26 April 2022.

As incoming president, my role is to look forward to the coming year, and I'll do that in a moment. But first, I want to look back at the past year and thank Kirsty Taylor for her service as STC President during a challenging time.

Most of us never expected the global pandemic to continue for a year, much less two years — and counting. It has taken a toll on many, both physically and mentally, but throughout the past year Kirsty has remained focused on the Society, our members, and others involved in technical communication. She committed to being a transparent leader, and she has done just that. Through her regular columns in *Intercom* and frequent activity on Slack and social media, Kirsty has engaged the STC audience practically on a daily basis and has been a visible, accessible representative of the Society. And she did it from Australia, many miles and multiple time zones away from those of us in Europe and North America! She has been a role model of dedicated leadership, and I ask you to join me in thanking her for service.

Now, I would like to look back a little further — to 1953. In Asia, Mount Everest was summitted successfully for the first time. In Europe, the coronation of Queen Elizabeth II took place. And in the United States, the Society of Technical Writers and the Association of Technical Writers and Editors were founded — a few years later they would merge to form the Society of Technical Writers and Editors, which eventually would be renamed the Society for Technical Communication.

This means that in a few months, we will mark the 70th anniversary year of STC, and just over a year from now we'll host our 70th annual conference in Atlanta. And that is something to look forward to!

It's hard to predict what the coming year holds for any of us, but from an STC perspective there are a few things you can count on, including:

- Top-notch educational offerings, from one-hour webinars to multi-day conferences to multi-week courses;
- The ongoing expansion of our certification program, which already offers Foundation and Practitioner levels with Expert-level certification coming soon;
- Information — and opportunities to publish — in our award-winning publications, our website, and our Body of Knowledge;
- A range of honors and awards recognizing achievements in the field of technical communication;
- A scholarship program and other activities for students, to help prepare the next generation to step into roles as technical communicators and educators;
- Networking opportunities to help those who are new to our field find out about the career options available and learn from the experience of those who have been working in tech comm for a while;
- Programs, conferences, competitions, and communications driven by our chapters and special interest groups;
- Training and support for our community leaders offered through the Community Affairs Committee;
- And a renewed focus on securing the financial future of our organization by creating new offerings for our members and others involved in the profession of technical communication.

There will be challenges along the way — there always are — but I'm looking forward to working with the STC board, staff, and our entire membership to build on our past success and build for the future. It will take all of us working together, and with that in mind, I'm especially interested in hearing from you. You can share your suggestions and questions with the entire board anytime by writing to board@stc.org — and I hope you will. ■

AIESSA MOYNA (amoyna.stc @gmail.com) is the 2022-2023 president of STC. Her recurring column will provide updates and insights on Board activities and solicit member feedback to guide ongoing decision-making.

Without Quilting, I Wouldn't Be in Tech Comm

BY ANITA MATECHUK

One of my earliest memories is of my Grandma's crying blanket. Even as a preschooler, I knew it was ugly, and I had to be careful where I touched it because most of it was rough and scratchy. Grandma pulled it out whenever I was sad, sick, or needed a nap. It represented comfort and her love, and from then on, whenever I saw a quilt, I knew someday I was going to make one.

Discovering Quilt Pattern Designing

I find making a quilt top relaxing, choosing the colors, and watching the design come together. Sometimes there can be swearing, bleeding, or crying involved. However, this is perfectly normal for a quilter.

Now while I am a quilter, I loathe the quilting process leaving me with a lot of works in progress (WIP) or perhaps unfinished objects (UFO) — there is not a defined timeline for when a WIP becomes a UFO. The quilting

process involves stitching the quilt top to the batting (warm fluffy layer) and backing fabric. For me, this requires crawling on the floor as I pin the three layers together while continually removing dog toys that my dog magically manages to toss on the quilt. Then, once I have it pinned together, I have to maneuver the bulk of the quilt through my sewing machine for what feels like a thousand times until I've stitched it together.

I began focusing on quilt pattern designing instead of sewing to save myself from the quilting process. The logic puzzle of design work filled my need to create as I worked to get all the instructions to fit while ensuring it filled the needs of all my readers. Unfortunately, as the subject matter expert (SME), I ended up with four times as many quilt tops because I was no longer sewing a quilt top for my enjoyment but testing the best way to sew it.

Finding Tech Comm

Getting laid off during a pandemic gave me the time to evaluate where I wanted my career to go. A technical writing job in my job search sounded intriguing. It offered the option of remote work, opened up my job options, and included my favorite parts of my past work experience. The job asked for experience in Adobe FrameMaker, and since it had been years since I used it, I decided to refresh my skills and research the program. For some reason, that initial search brought up Adobe InDesign instead. Looking at the software, I knew I wanted to use it in my hobby of quilt pattern designing.

The logic puzzle of design work filled my need to create as I worked to get all the instructions to fit while ensuring it filled the needs of all my readers.

Searching for schooling for the technical writer role led me to the Simon Fraser University (SFU) Technical Communication Certificate program. The first available course I could take was on Adobe InDesign. Needing something that didn't create quilt tops to fill my time, I decided to apply to the program. After all, even if I didn't like Tech Comm the classes would help me build my pattern-designing skills.

Learning Tech Comm

Starting out in Tech Comm, I knew I needed to decide the direction I wanted my career to go, but how could I when I didn't understand my options. So I began researching everything that sounded useful in quilt pattern designing. I figured if I wanted to learn it for my hobby, I might like it for a career.

As I built my tech comm skills, I began writing for other quilt pattern designers. Writing for other designers had benefits for me. For example, another SME now dealt with finding room for the quilt tops, and I got paid for doing my hobby.

Until now, I hadn't considered paying someone else to finish my quilts, but with the piles of quilt tops looming overhead, something needs to be done. So with the funds coming in from my writing hobby, I'm happily sending out my quilt tops for quilting. I write faster than I sew, and the piles of quilt tops are shrinking. However, I'm not sure what I'll do when the completed quilts come back, and I have to make room for those piles. ■

Anita Matechuk (linkedin.com/in/anita-matechuk-5b20511a4) is a recent graduate of Simon Fraser University's Technical Communication Certificate program. Although new to the tech comm field, she has a BASc in Electronic Systems Engineering and experience in the banking industry. She is currently working as a freelance technical writer.

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STC Online Courses	6
STC Summit Pre-Conference Courses (full day)	6
STC Summit Pre-Conference Courses (half day)	3
STC Annual Summit	8
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